FIG.1

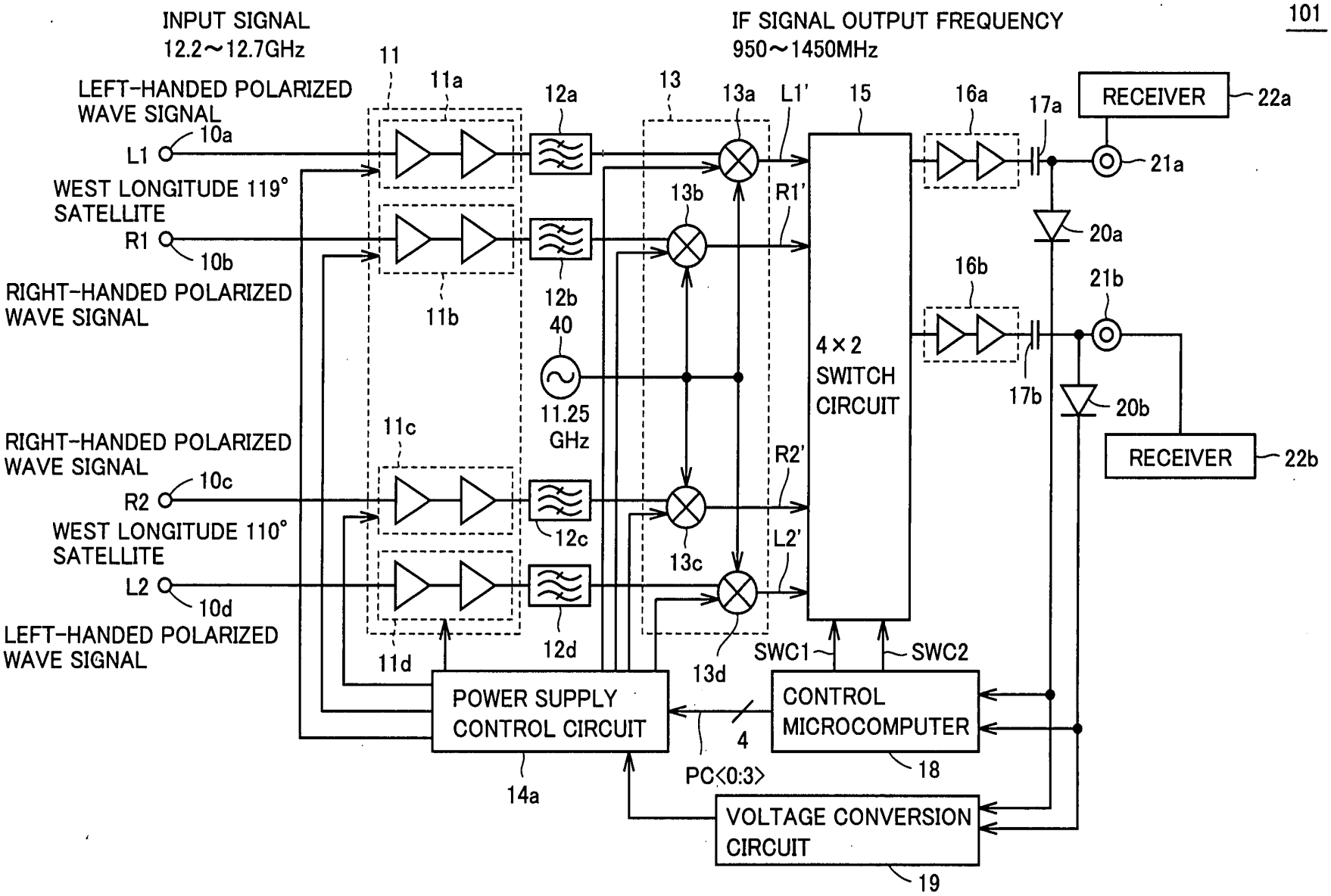

INPUT SIGNAL
12.2～12.7GHz
IF SIGNAL OUTPUT FREQUENCY
950～1450MHz
101
LEFT-HANDED POLARIZED WAVE SIGNAL
L1
10a
WEST LONGITUDE 119° SATELLITE
R1
10b
RIGHT-HANDED POLARIZED WAVE SIGNAL
RIGHT-HANDED POLARIZED WAVE SIGNAL
R2
10c
WEST LONGITUDE 110° SATELLITE
L2
10d
LEFT-HANDED POLARIZED WAVE SIGNAL
11
11a
11b
11c
11d
12a
12b
12c
12d
13
13a
13b
13c
13d
40
11.25 GHz
L1'
R1'
R2'
L2'
15
4×2 SWITCH CIRCUIT
16a
16b
17a
17b
RECEIVER
22a
21a
20a
21b
20b
RECEIVER
22b
SWC1
SWC2
POWER SUPPLY CONTROL CIRCUIT
14a
4
PC<0:3>
CONTROL MICROCOMPUTER
18
VOLTAGE CONVERSION CIRCUIT
19

FIG.2

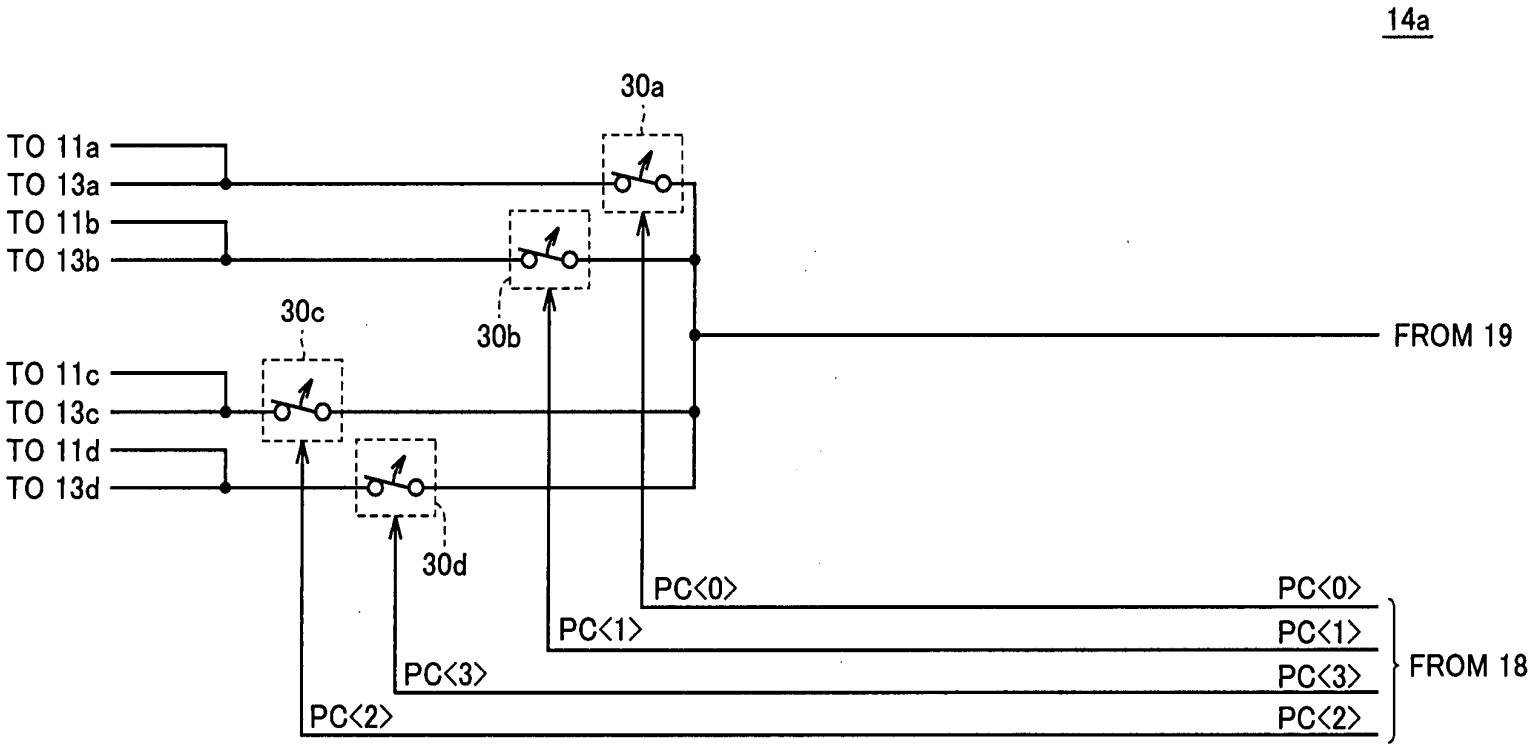

14a
30a
TO 11a
TO 13a
TO 11b
TO 13b
30b
30c
TO 11c
TO 13c
TO 11d
TO 13d
30d
FROM 19
PC<0>
PC<1>
PC<3>
PC<2>
PC<0>
PC<1>
PC<3>
PC<2>
FROM 18

FIG.3

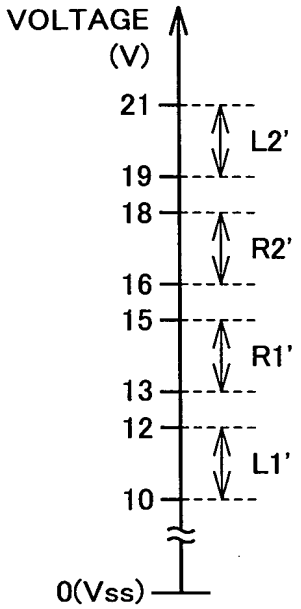


FIG.4

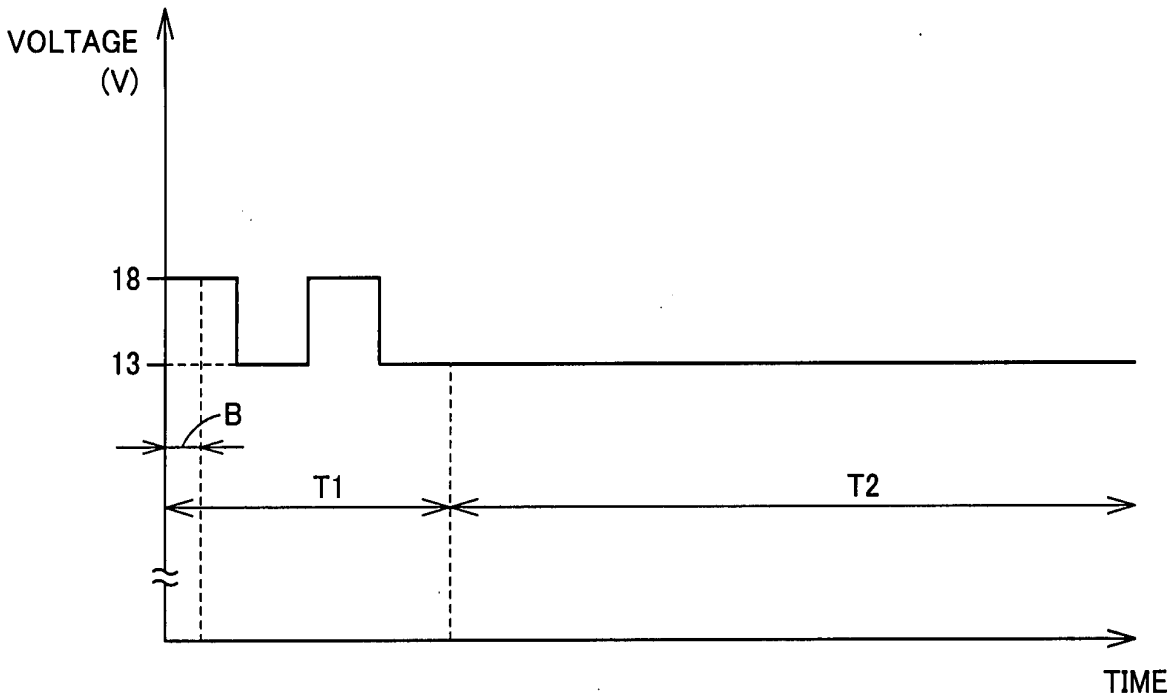


FIG.5

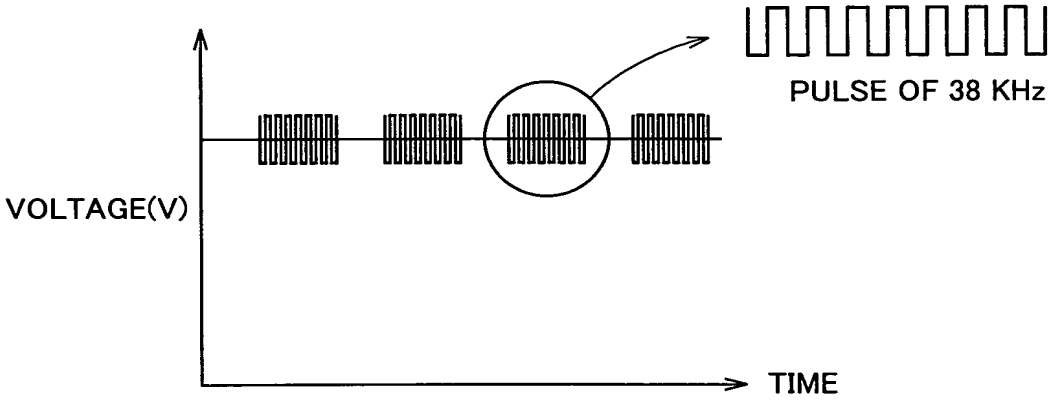


FIG.6

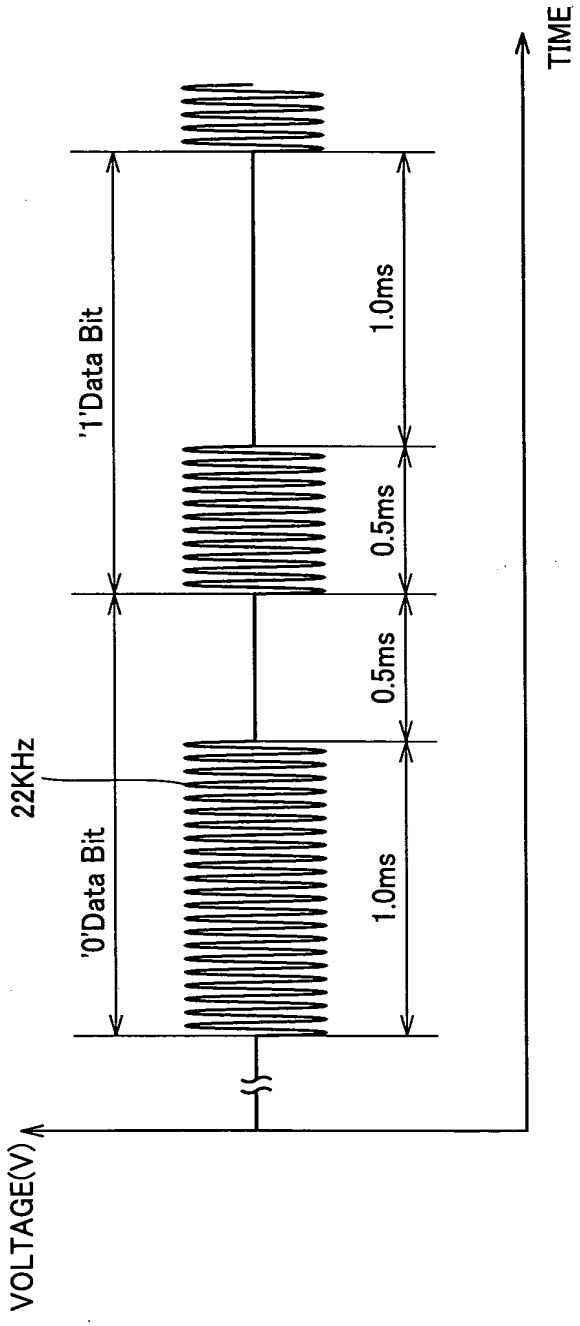
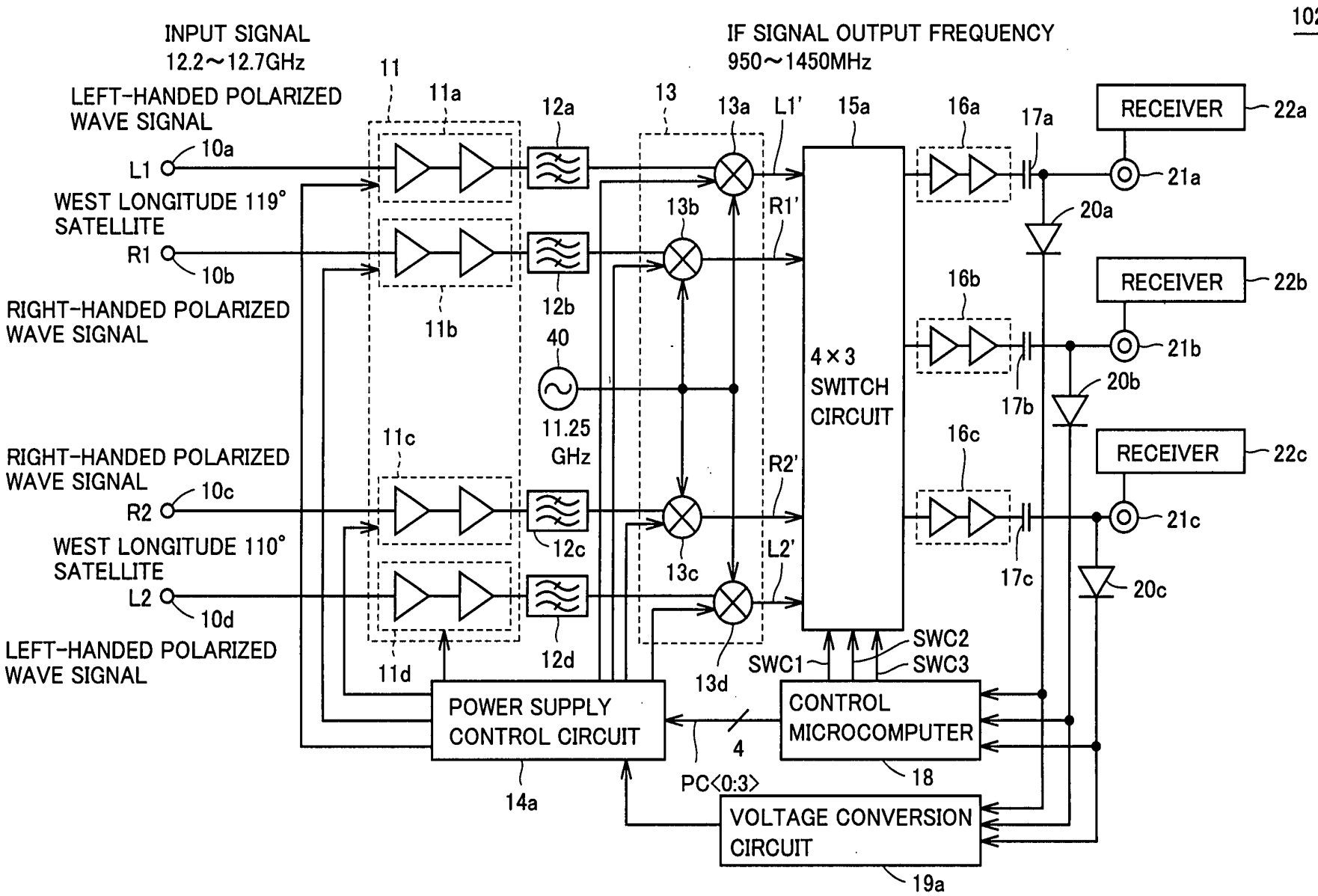


FIG.7


102
INPUT SIGNAL
12.2～12.7GHz
IF SIGNAL OUTPUT FREQUENCY
950～1450MHz
LEFT-HANDED POLARIZED WAVE SIGNAL
L1
10a
WEST LONGITUDE 119° SATELLITE
R1
10b
RIGHT-HANDED POLARIZED WAVE SIGNAL
RIGHT-HANDED POLARIZED WAVE SIGNAL
R2
10c
WEST LONGITUDE 110° SATELLITE
L2
10d
LEFT-HANDED POLARIZED WAVE SIGNAL
11
11a
11b
11c
11d
12a
12b
12c
12d
13
13a
13b
13c
13d
40
11.25 GHz
L1'
R1'
R2'
L2'
15a
4×3 SWITCH CIRCUIT
16a
16b
16c
17a
17b
17c
20a
20b
20c
RECEIVER
22a
21a
RECEIVER
22b
21b
RECEIVER
22c
21c
SWC1
SWC2
SWC3
POWER SUPPLY CONTROL CIRCUIT
14a
CONTROL MICROCOMPUTER
18
4
PC<0:3>
VOLTAGE CONVERSION CIRCUIT
19a

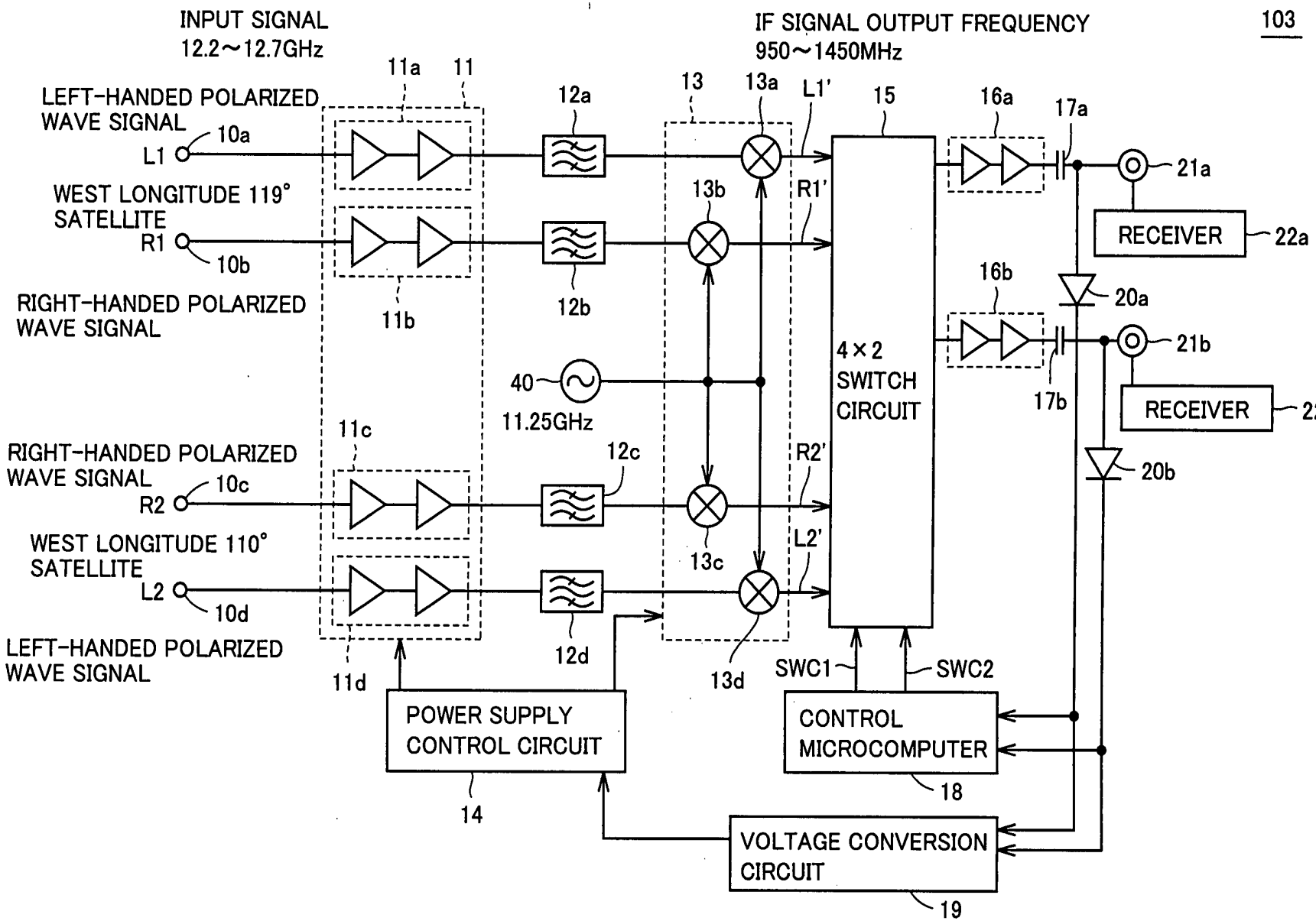



FIG.8 PRIOR ART